traxon

CREATIVE **LIGHTING** TECHNOLOGIES

USER MANUAL

COVE LIGHT 12 SMD RGB
STRIP 12 SMD RGB

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Smart Chip - Version 1.2 Manual - Version 1.1

USER MANUAL

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FOR YOUR OWN SAFETY AND THAT OF THE PRODUCT, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE BEGINNING SET-UP AND INSTALLATION!

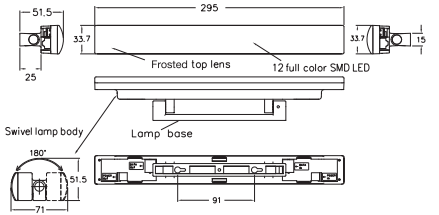
1. INTRODUCTION

COVE LIGHT 12 SMD RGB (1PXL/DMX) MO-CL-52701
COVE LIGHT 12 SMD RGB (1PXL/RF) MO-CL-22701
COVE LIGHT12 SMD RGB (1PXL/SLAVE) MO-CL-02701
STRIP 12 SMD RGB (1PXL/DMX) MO-ST-50101
STRIP 12 SMD RGB (1PXL/RF) MO-ST-20101
STRIP 12 SMD RGB (1PXL/SLAVE) MO-ST-00101

These products are part of the Traxon™ Modules product line, enabling the use of RGB LED color changing systems in a linear configuration. On-board SMART CHIP™ technology (used in the DMX Versions) with the powerful feature of Auto-Addressing enables fast and easy setup and installation. High power LED technology combined with low power consumption brings the best solution possible for any number of applications.

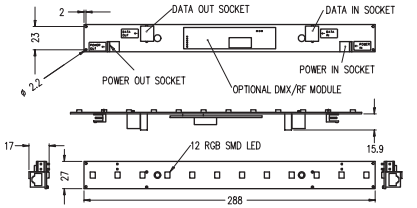
COVE LIGHT 12 SMD RGB

- 180° Position Adjustment
- 12 Ultra Bright SMD LED
- DMX or RF Control Options
- Auto-Addressing (DMX Version Only)
- SMART CHIP™ (DMX Version Only)
- RJ45 Cat5 Data Cabling



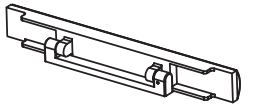
STRIP 12 SMD RGB

- 12 Ultra Bright SMD LED
- DMX or RF Control Options
- Auto-Addressing (DMX Version Only)
- SMART CHIP™ (DMX Version Only)
- RJ45 Cat5 Data Cabling



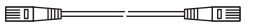
2. CONTENTS

COVE LIGHT 12 SMD RGB (MO-CL-52701, MO-CL-22701, MO-CL-02701)



1 X Cove Light 12 SMD RGB

1 X DC Power Cable

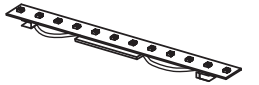


1 X RJ45 Data Cable

1 X 3mm Hex Key

2 X M3 Screw

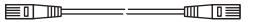
STRIP 12 SMD RGB (MO-ST-50101, MO-ST-20101, MO-ST-00101)



1 X Strip 12 SMD RGB

1 X DC Power Cable

2 X M3 Screw



1 X RJ45 Data Cable

2 x Nylon Spacer

3. SAFETY AND OPERATION

CAUTION – UNPLUG THE POWER SUPPLY FROM MAINS POWER BEFORE CONNECTING ANY CABLES AS THIS CAN DAMAGE THE PRODUCTS !

CAUTION – AVOID LOOKING DIRECTLY INTO THE LED LIGHT SOURCE AT CLOSE RANGE FOR YOUR OWN SAFETY.

ANY PERSON INSTALLING THIS PRODUCT SHOULD COMPLY WITH LOCAL STANDARDS AND REGULATIONS AND MUST BE QUALIFIED FOR THE HANDLING OF ELECTRICAL EQUIPMENT.

This product is designed for indoor use only

An ambient operating air temperature range of 0°C~+50°C (+32°F ~ +122°F) must be adhered to at all times

If the fixture has been subjected to drastic temperature variances, e.g. following transportation, do not connect the fixture until it has reached room temperature, as internal condensation build-up may damage the fixtures' electronics.

When installing the fixtures and system power supplies in the chosen locations, please ensure that they will not be exposed to moisture, extreme heat or direct sunlight and that it is in a dirt and dust free environment keeping the fixtures and system power supplies within their operating boundaries.

Please study all functions in this User Manual throughly and check the latest Technical Specifications Sheets available from our website [www.traxontechnologies.com] before set-up.

4. PRODUCT DESCRIPTION

The 'Cove Light 12 SMD RGB' and 'Strip 12 SMD RGB' are part of the MODULES product line and features include low power consumption, high light output with a wide even beam angle and an option of DMX512 with SMART CHIP™ technology or RF remote control. The SMART CHIP™ is a world first technology that includes the powerful feature of DMX auto start-addressing and channel selection.

• MASTER – MASTER (DMX Versions)

'COVE LIGHT 12 SMD RGB DMX' and 'STRIP 12 SMD RGB DMX' are referred to as MASTER fixtures with control via DMX512 with SMART CHIP™ technology. Once the primary MASTER has been selected, subsequent MASTER models can be added with individual control via DMX. The on-board SMART CHIP™ automatically assigns DMX start-addresses to all connected MASTER fixtures upon powering up of the system.

• MASTER – SLAVE (DMX & RF Versions)

'COVE LIGHT 12 SMD RGB DMX' , 'COVE LIGHT 12 SMD RGB RF' and 'STRIP 12 SMD RGB DMX' , 'STRIP 12 SMD RGB RF' are all referred to as being MASTER fixtures with control via DMX512 with SMART CHIP™ technology or via RF remote control depending on the model chosen. Using them together with the SLAVE versions 'COVE LIGHT 12 SMD RGB SLAVE' or 'STRIP 12 SMD RGB SLAVE' , the MASTER-SLAVE control relationship is utilized for simultaneous color change of all fixtures, with only the MASTER receiving the control signal and then sending the same signal to the other fixtures in the daisy-chain.

5. INSTALLATION AND SYSTEM CONFIGURATION

5-1 MOUNTING

5-1.1 COVE LIGHT 12 SMD RGB

For installation, use the M3 screws provided for mounting to a flat surface (FIG 1). Select the desired position and fasten the screws in place, taking care not to fix too tightly, but enough to hold the Cove Light firmly in place. On the Cove Light base, you will find a hex screw for fixing the beam angle (FIG 2 & 3). When using the provided 3mm Hex Key, take care not to fix too tightly as overtightening can damage the fixture.

FIG 1

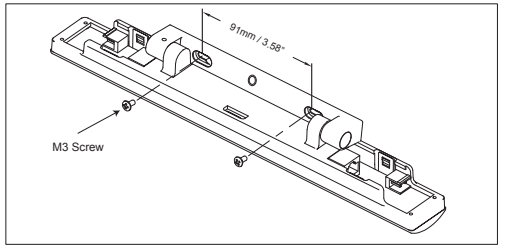


FIG 2

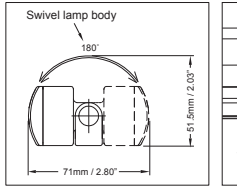
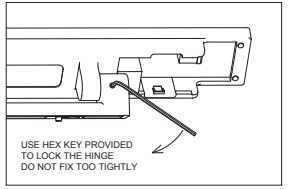
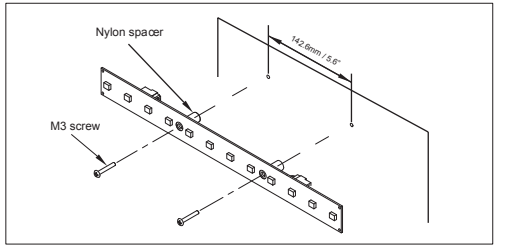


FIG 3



5-1.2 STRIP 12 SMD RGB

FIG 4

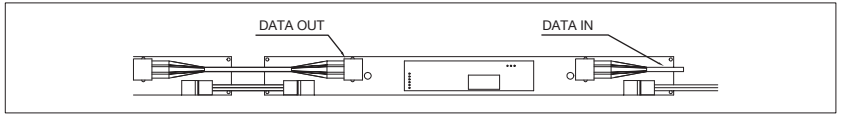


For installation, first place the nylon spacers provided into the mounting holes on the bottom side of the Strip, then use the M3 screws to mount to a flat surface. Select the desired position and fasten the screws in place, taking care not to fix too tightly, but enough to hold it firmly in place (FIG 4).

5-2 DATA CONNECTION

Data connection is via the RJ45 sockets on the fixtures and the RJ 45 CAT5 patch cable that is supplied with each fixture. For connection as per the diagram, follow the 'DATA IN' and 'DATA OUT' marking on the bottom of the fixture and firmly connect the cables in a daisy-chain configuration (FIG 5).

FIG 5



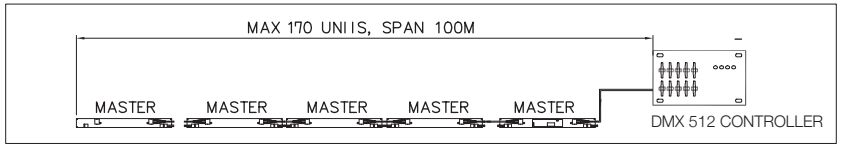
IMPORTANT NOTE – DATA CONNECTION:

PLEASE BE SURE TO FOLLOW THE 'DATA IN' AND 'DATA OUT' MARKINGS WHEN INTERCONNECTING TWO FIXTURES AS FAILURE TO DO SO WILL RESULT IN THE PRODUCT NOT WORKING AND COULD CAUSE DAMAGE TO THE FIXTURES VOIDING THE WARRANTY

• MASTER-MASTER DATA CONNECTION

For MASTER-MASTER data connection, a maximum of 170 MASTER fixtures can be connected together in a daisy-chain configuration. The on-board SMART CHIP™ technology is used to automatically assign the DMX start-addresses once all data connections are made and when powering up the system power supply/supplies (FIG 6).

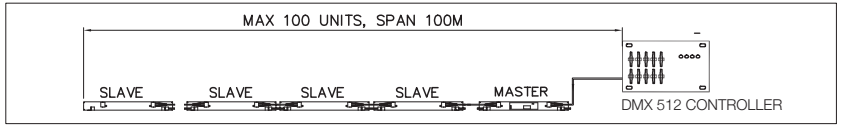
FIG 6



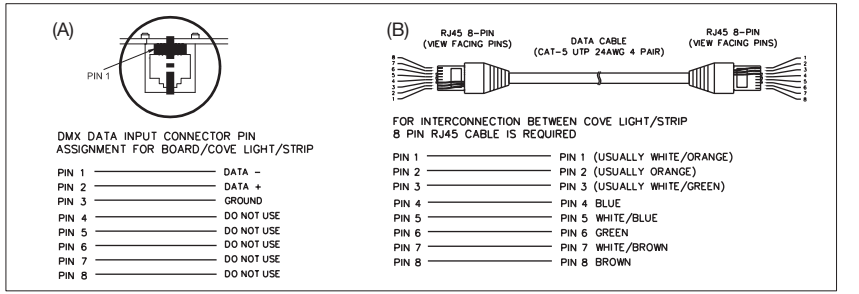
• MASTER-SLAVE DATA CONNECTION

For MASTER-SLAVE data connections, a maximum of 99 SLAVE fixtures can be connected to 1 MASTER fixture in a daisy-chain configuration (FIG 7).

FIG 7



• DMX512 CONTROLLER (A) / RJ45 INTERCONNECTION CABLE (B) - PIN OUT CONFIGURATION

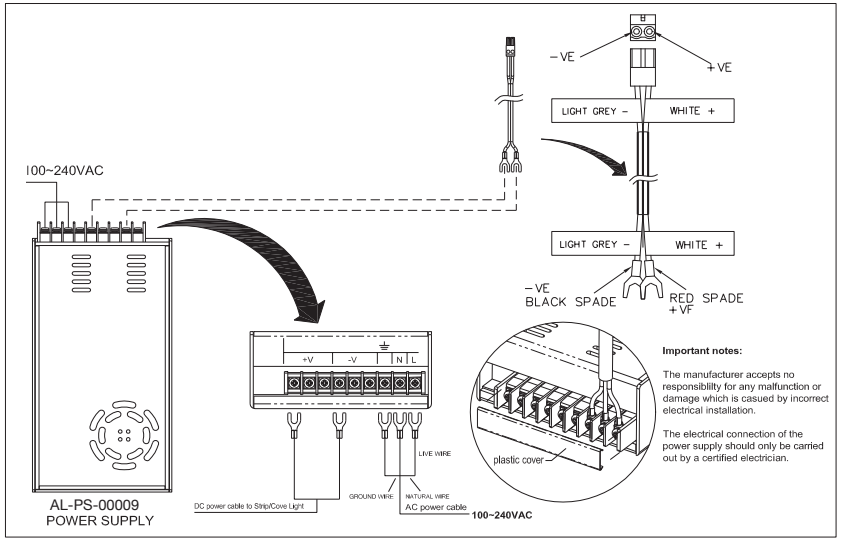

(A)
PIN 1
DMX DATA INPUT CONNECTOR PIN
ASSIGNMENT FOR BOARD/COVE LIGHT/STRIP
PIN 1 — DATA -
PIN 2 — DATA +
PIN 3 — GROUND
PIN 4 — DO NOT USE
PIN 5 — DO NOT USE
PIN 6 — DO NOT USE
PIN 7 — DO NOT USE
PIN 8 — DO NOT USE
(B)
RJ45 8-PIN (VIEW FACING PINS)
DATA CABLE (CAT-5 UTP 24AWG 4 PAIR)
RJ45 8-PIN (VIEW FACING PINS)
FOR INTERCONNECTION BETWEEN COVE LIGHT/STRIP
8 PIN RJ45 CABLE IS REQUIRED
PIN 1 — PIN 1 (USUALLY WHITE/ORANGE)
PIN 2 — PIN 2 (USUALLY ORANGE)
PIN 3 — PIN 3 (USUALLY WHITE/GREEN)
PIN 4 — PIN 4 BLUE
PIN 5 — PIN 5 WHITE/BLUE
PIN 6 — PIN 6 GREEN
PIN 7 — PIN 7 WHITE/BROWN
PIN 8 — PIN 8 BROWN

CAUTION – THE DMX DATA INPUT CONNECTOR PIN ASSIGNMENT MUST MATCH THE ABOVE DETAILS. FAILURE TO DO SO WILL RESULT IN THE PRODUCT NOT WORKING AND COULD CAUSE DAMAGE TO THE FIXTURES VOIDING THE WARRANTY.

5-3 POWER CONNECTION

The 'Cove Light 12 SMD RGB' and 'Strip 12 SMD RGB' range use an external 24V DC system power supply. For connection of the mains AC input cable with the 24V DC output, please refer to the diagram below (FIG 8).

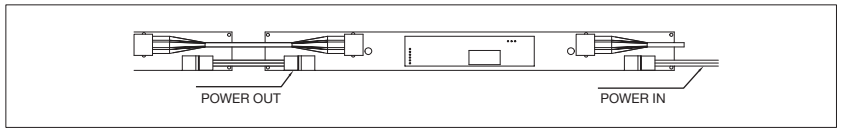
FIG 8



IMPORTANT NOTE – DC POWER CONNECTION:

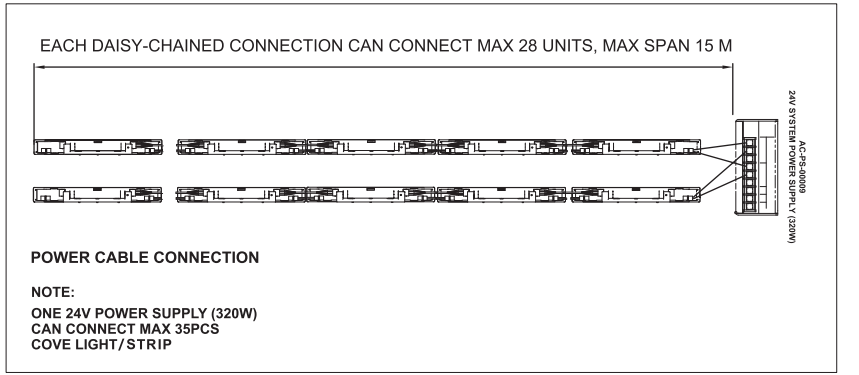
PLEASE BE SURE TO FOLLOW THE 'POWER IN' AND 'POWER OUT' MARKINGS WHEN CONNECTING AS FAILURE TO DO SO WILL RESULT IN THE PRODUCT NOT WORKING AND COULD CAUSE DAMAGE TO THE FIXTURES VOIDING THE WARRANTY(FIG 9).

FIG 9



For the DC power connection a maximum of 35 'COVE LIGHT 12 SMD RGB' and/or 'STRIP 12 SMD RGB' fixtures can be connected to any 1 System Power Supply (320W). In 1 daisy-chain configuration a maximum of 28 'COVE LIGHT 12 SMD RGB' and/or 'STRIP 12 SMD RGB' are allowed, as well as a maximum DC cable span of 15m, starting from the System Power Supply connection terminals to the last fixture in the chain. Please refer diagram below (FIG 10).

FIG 10


EACH DAISY-CHAINED CONNECTION CAN CONNECT MAX 28 UNITS, MAX SPAN 15 M
24V SYSTEM POWER SUPPLY (320W)
AC-PS-00009
POWER CABLE CONNECTION
NOTE:
ONE 24V POWER SUPPLY (320W)
CAN CONNECT MAX 35PCS
COVE LIGHT/STRIP

CAUTION – PLEASE ENSURE THAT THE POWER IS SWITCHED OFF WHEN THE DATA CABLES ARE BEING CONNECTED

5-4 CONTROL

• DMX 512 (DMX Versions only)

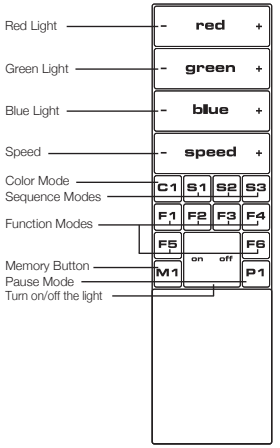
CHANNEL 1	RED	DMX VALUE 0-255
CHANNEL 2	GREEN	DMX VALUE 0-255
CHANNEL 3	BLUE	DMX VALUE 0-255

DMX VALUES TO ACHIEVE SET COLORS

COLOR	CHANNEL 1	CHANNEL 2	CHANNEL 3
RED	255	0	0
GREEN	0	255	0
BLUE	0	0	255
CYAN	0	255	255
YELLOW	255	255	0
MAGENTA	255	0	255

• RF REMOTE CONTROL (RF Versions only)

Please refer to the RF Remote Control User Manual for detailed information.



- Sequence Modes:
  Chill (S1), Motion (S2), Action (S3)
- Function Modes:
  Random (F1), Fusion (F2), Pulse (F3), Rave (F4), Ray (F5), Moments (F6)

6. CARE AND MAINTENANCE

Traxon™ products are of superior design and quality and should be treated with care. The recommendations below will help fulfill and warranty obligations and gain good use and longevity from the products.

- Make sure that the products are installed correctly and securely
- For indoor use only
- Keep products in a dry and precipitation free area as this may damage the products' electronics
- Keep products in a dirt and dust free environment
- Make sure the products are not exposed to extreme heat and that they have sufficient airflow and cool air circulation if required
- Do not attempt to service or repair the products unless done by an authorized service personnel. Contact the local Traxon office or distributor for details
- Do not drop, knock or shake the products as rough handling may damage the electronics and void the warranty
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean. Wipe with a damp cloth on housings and a dry cloth on electronics to remove dirt or dust

If the products are not working correctly, please contact your nearest authorized service centre or Traxon office for assistance.

7. TECHNICAL SPECIFICATIONS

COVE LIGHT 12 SMD RGB & STRIP 12 SMD RGB

Color Range – 16.7 million of additive RGB colors with variable intensity
Light Source – Ultra Bright SMD LED
Source Life – 50,000 hours under normal operating conditions
Beam Angle – 120°
Power Input – 24VDC
Current Consumption: 0.375A max
Power Consumption – 9W max
Operating Temperature – Range 0°C ~ +50°C (+32°F ~ +122°F)